No.	Type	Title	Authors	Title of the Journal/Proc./Book	Number, date	Is Peer-reviewed?	Is Open Access?	DOI	Repository Link
1	Article in Journal	Eco-efficiency analysis of plasma-assisted nitrogen fixation	A Anastasopoulou, R Keijzer, S Butala, J Lang, G Van Rooij, V Hessel	Journal of Physics D: Applied Physics	53/23	Yes	Green	10.1088/1361-6463/ab71a8	https://universityofadelaide.box.com/s/xds8ot8xi73ryrxt1ybc948iqcw0lwfj
2	Article in Journal	Enhanced performance in the direct electrocatalytic synthesis of ammonia from N2 and H2O by an in-situ electrochemical activation of CNT-supported iron oxide nanoparticles	Shiming Chen, Siglinda Perathoner, Claudio Ampelli, Hua Wei, Salvatore Abate, Bingsen Zhang, Gabriele Centi	Journal of Energy Chemistry	49	Yes	Green	10.1016/j.jechem.2020.01.011	https://iris.unime.it/retrieve/344691/JEC%202020%2c%2049%2c%20%2022%e2%80%9332%20Preprint.pdf
3	Article in Journal	The 2020 plasma catalysis roadmap	Annemie Bogaerts, Xin Tu, J Christopher Whitehead, Gabriele Centi, Leon Lefferts, Olivier Guaitella, Federico Azzolina-Jury, Hyun-Ha Kim, Anthony B Murphy, William F Schneider, Tomohiro Nozaki, Jason C Hicks, Antoine Rousseau, Frederic Thevenet, Ahmed Khacef, Maria Carreon	Journal of Physics D: Applied Physics	53/44	Yes	Gold	10.1088/1361-6463/ab9048	https://iris.unime.it/retrieve/handle/11570/3175155/337137/3175155.pdf
4	Article in Journal	Economics of CO2 Utilization: A Critical Analysis	Gabriele Centi, Siglinda Perathoner, Annarita Salladini, Gaetano Iaquaniello	Frontiers in Energy Research	8	Yes	Gold	10.3389/fenrg.2020.567986	https://iris.unime.it/retrieve/handle/11570/3177782/344755/fenrg-08-567986.pdf
5	Article in Journal	Direct Synthesis of Ammonia from N2 and H2O on Different Iron Species Supported on Carbon Nanotubes using a Gas-Phase Electrocatalytic Flow Reactor	Shiming Chen, Siglinda Perathoner, Claudio Ampelli, Hua Wei, Salvatore Abate, Bingsen Zhang, Gabriele Centi	ChemElectroChem	7/14	Yes	Green	10.1002/celc.202000514	https://iris.unime.it/retrieve/429395/ChemElectroChem%202020%2c%207%2c%203028%20Manuscript%20PREPRINT.pdf
6	Article in Journal	A novel gas flow-through photocatalytic reactor based on copper-functionalized nanomembranes for the photoreduction of CO2 to C1-C2 carboxylic acids and C1-C3 alcohols	Daniele Giusi, Claudio Ampelli, Chiara Genovese, Siglinda Perathoner, Gabriele Centi	Chemical Engineering Journal	408	Yes	Green	10.1016/j.cej.2020.127250	https://iris.unime.it/retrieve/handle/11570/3177784/344759/CEJ%202020_manuscript_Preprint.pdf
7	Article in Journal	Plasma Technology for CO2 Conversion: A Personal Perspective on Prospects and Gaps	Annemie Bogaerts, Gabriele Centi	Frontiers in Energy Research	8	Yes	Gold	10.3389/FENRG.2020.00111	https://iris.unime.it/retrieve/handle/11570/3175145/337144/3175145.pdf
8	Article in Journal	Thermodynamic potential of a novel plasma-assisted sustainable process for co-production of ammonia and hydrogen with liquid metals	M.M. Sarafraz, N.N. Tran, N. Pourali, E.V. Rebrov, V. Hessel	Energy Conversion and Management	210	Yes	Green	10.1016/j.enconman.2020.112709	https://universityofadelaide.box.com/s/xxlet38kp2jzi4l2urn3olm4hsm3kadm
9	Article in Journal	Perspectives on plasma-assisted synthesis of N-doped nanoparticles as nanopesticides for pest control in crops	Quoc Hue Pho, Dusan Losic, Kostya (Ken) Ostrikov, Nam Nghiep Tran, Volker Hessel	Reaction Chemistry & Engineering	5/8	Yes	Green	10.1039/d0re00069h	https://universityofadelaide.box.com/s/xt6x4qoutl09d5mvyyh0juu1ubhil44g
10	Article in Journal	Plasma-assisted nitrogen fixation in nanomaterials: fabrication, characterization, and application	Liangliang Lin, Hujun Xu, Haiyan Gao, Xiangmiao Zhu, Volker Hessel	Journal of Physics D: Applied Physics	53/13	Yes	Green	10.1088/1361-6463/ab5f1f	https://universityofadelaide.box.com/s/r5k2ylquoqv74fxhdac2z2y87xw9wekm
11	Article in Journal	Plasma-Based CH4 Conversion into Higher Hydrocarbons and H2: Modeling to Reveal the Reaction Mechanisms of Different Plasma Sources	Stijn Heijkers, Maryam Aghaei, Annemie Bogaerts	The Journal of Physical Chemistry C	124/13	Yes	Gold	10.1021/acs.jpcc.0c00082	https://repository.uantwerpen.be/docstore/d:irua:509
12	Article in Journal	Plasma-Based CO2 Conversion: To Quench or Not to Quench?	Vincent Vermeiren, Annemie Bogaerts	The Journal of Physical Chemistry C	124/34	Yes	Green	10.1021/acs.jpcc.0c04257	https://repository.uantwerpen.be/docstore/d:irua:2612
13	Article in Journal	CO2 and CH4 conversion in “real” gas mixtures in a gliding arc plasmatron: how do N2 and O2 affect the performance?	Joachim Slaets, Maryam Aghaei, Sara Ceulemans, Senne Van Alphen, Annemie Bogaerts	Green Chemistry	22/4	Yes	Green	10.1039/c9gc03743h	https://repository.uantwerpen.be/docstore/d:irua:200
14	Article in Journal	Plasma-Based N2 Fixation into NOx : Insights from Modeling toward Optimum Yields and Energy Costs in a Gliding Arc Plasmatron	Elise Vervloessem, Maryam Aghaei, Fatme Jardali, Neda Hafezkhiabani, Annemie Bogaerts	ACS Sustainable Chemistry & Engineering	8/26	Yes	Green	10.1021/ACSSUSCHEMENG.0C01815	https://repository.uantwerpen.be/docstore/d:irua:1415
15	Article in Journal	Plasma Catalysis for CO2 Hydrogenation: Unlocking New Pathways toward CH3OH	Roel Michiels, Yannick Engelmann, Annemie Bogaerts	The Journal of Physical Chemistry C	124/47	Yes	Green	10.1021/acs.jpcc.0c07632	https://repository.uantwerpen.be/docstore/d:irua:3464
16	Article in Journal	Comparing Molecular Mechanisms in Solar NH3 Production and Relations with CO2 Reduction	Domenico Mallamace, Georgia Papanikolaou, Siglinda Perathoner, Gabriele Centi, Paola Lanzafame	International Journal of Molecular Sciences	22/1	Yes	Gold	10.3390/ijms22010139	https://iris.unime.it/retrieve/handle/11570/3184658/364246/Comparing%20Molecular%20Mechanisms%20in%20Solar%20NH3%20Production%20and%20Relations%20with%20CO2%20Reduction.pdf
17	Article in Journal	Redesign chemical processes to substitute the use of fossil fuels: A viewpoint of the implications on catalysis	Gabriele Centi, Siglinda Perathoner	Catalysis Today	online in press	Yes	Green	10.1016/j.cattod.2021.03.007	https://iris.unime.it/retrieve/handle/11570/3203091/429418/CATTOD%20Redesign%20%20-%20Centi%20-%20PREPRINT.pdf
18	Article in Journal	Enhancing N2 Fixation Activity by Converting Ti3C2 MXenes Nanosheets to Nanoribbons	Hua Wei, Qian Jiang, Claudio Ampelli, Shiming Chen, Siglinda Perathoner, Yuefeng Liu, Gabriele Centi	ChemSusChem	13/21	Yes	Green	10.1002/cssc.202001719	https://iris.unime.it/retrieve/handle/11570/3175159/344723/CSC%20Enhanced%20N2_PostPrint%20.pdf

19	Article in Journal	Microfluidic plasmas: Novel technique for chemistry and chemical engineering	Liangliang Lin, Hue Quoc Pho, Lu Zong, Sirui Li, Nima Pourali, Evgeny Rebrov, Nam Nghiep Tran, Kostya (Ken) Ostrikov, Volker Hessel	Chemical Engineering Journal	417	Yes	Green	10.1016/j.cej.2021.129355	https://universityofadelaide.box.com/s/z0raw8n1ohb4pdx0p5qny9j9wwianjpc
20	Article in Journal	Tri-fold process integration leveraging high- and low-temperature plasmas: From biomass to fertilizers with local energy and for local use	Mohammad M. Sarafraz, Nam N. Tran, Hung Nguyen, Laurent Fulcheri, Rachel Burton, Peter Wadewitz, Gregory Butler, Lawrence Kirton, Volker Hessel	Journal of Advanced Manufacturing and Processing	3/2	Yes	Gold	10.1002/amp2.10081	https://universityofadelaide.box.com/s/z3q7a4k9a1xsbbstqryeewojw4fl2qfj
21	Article in Journal	Pretreatment and fermentation of lignocellulosic biomass: reaction mechanisms and process engineering	Shahrooz Rahmati, William Doherty, Deepak Dubal, Luqman Atanda, Lalehvash Moghaddam, Prashant Sonar, Volker Hessel, Kostya (Ken) Ostrikov	Reaction Chemistry & Engineering	5/11	Yes	Green	10.1039/d0re00241k	https://universityofadelaide.box.com/s/zonhkdkh3g5wiis35qhqzko2xycqtegi
22	Article in Journal	Survey of Synthesis Processes for N-Doped Carbon Dots Assessed by Green Chemistry and Circular and EcoScale Metrics	Quoc Hue Pho, Marc Escriba-Gelonch, Dusan Losic, Evgeny V. Rebrov, Nam Nghiep Tran, Volker Hessel	ACS Sustainable Chemistry & Engineering	9/13	Yes	Green	10.1021/acssuschemeng.0c09279	https://universityofadelaide.box.com/s/lp4act3e4jpah9fv1pdp2qfs2fry1pg2
23	Article in Journal	Simulation study of a pulsed DBD with an electrode containing charge injector parts	N. Pourali, M. M. Sarafraz, V. Hessel, E. V. Rebrov	Physics of Plasmas	28/1	Yes	Green	10.1063/5.0027562	https://universityofadelaide.box.com/s/t2jg0p94mu9hcctzci4fadgotepwmjef
24	Article in Journal	Plasma-Catalytic Ammonia Synthesis in a DBD Plasma: Role of Microdischarges and Their Afterglows	K. van 't Veer, Y. Engelmann, F. Reniers, A. Bogaerts	The Journal of Physical Chemistry C	124/42	Yes	Green	10.1021/acs.jpcc.0c05110	https://repository.uantwerpen.be/docstore/d:irua:3456
25	Article in Journal	Nox production in a rotating gliding arc plasma: potential avenue for sustainable nitrogen fixation	Fatme Jardali, Senne Van Alphen, James Creel, Hamid Ahmadi Eshtehardi, Magnus Axelsson, Rune Ingels, Rony Snyders, Annemie Bogaerts	Green Chemistry	23/4	Yes	Green	10.1039/d0gc03521a	https://repository.uantwerpen.be/docstore/d:irua:5001
26	Article in Journal	Sustainable gas conversion by gliding arc plasmas: a new modelling approach for reactor design improvement	Senne Van Alphen, Fatme Jardali, James Creel, Georgi Trenchev, Rony Snyders, Annemie Bogaerts	Sustainable Energy & Fuels	5/6	Yes	Green	10.1039/d0se01782e	https://repository.uantwerpen.be/docstore/d:irua:5917
27	Article in Journal	Plasma-Catalytic Partial Oxidation of Methane on Pt(111): A Microkinetic Study on the Role of Different Plasma Species	Björn Loenders, Yannick Engelmann, Annemie Bogaerts	The Journal of Physical Chemistry C	125/5	Yes	Green	10.1021/acs.jpcc.0c09849	https://repository.uantwerpen.be/docstore/d:irua:4912
28	Article in Journal	Spatially and temporally non-uniform plasmas: microdischarges from the perspective of molecules in a packed bed plasma reactor	K van 't Veer, S van Alphen, A Remy, Y Gorbanev, N De Geyter, R Snyders, F Reniers, A Bogaerts	Journal of Physics D: Applied Physics	54/17	Yes	Green	10.1088/1361-6463/abe15b	https://repository.uantwerpen.be/docstore/d:irua:4916
29	Article in Journal	From the Birkeland–Eyde process towards energy-efficient plasma-based NOX synthesis: a techno-economic analysis	Kevin H. R. Rouwenhorst, Fatme Jardali, Annemie Bogaerts, Leon Lefferts	Energy & Environmental Science	14/5	Yes	Gold	10.1039/d0ee03763j	https://repository.uantwerpen.be/docstore/d:irua:6348
30	Article in Journal	Thermal instability and volume contraction in a pulsed microwave N2 plasma at sub-atmospheric pressure.	Sean Kelly, Alex van de Steeg, Ashley Hughes, Gerard van Rooij, Annemie Bogaerts	Plasma sources science and technology	30	Yes	Green	10.1088/1361-6595/abf1d6	https://repository.uantwerpen.be/docstore/d:irua:6311
31	Article in Journal	Plasma catalysis for ammonia synthesis: A microkinetic modelling study on the contributions of Eley-Rideal reactions.	Yannick Engelmann, Kevin van 't Veer, Yury Gorbanev, Erik Cornelis Neyts, William F. Schneider, Annemie Bogaerts	ACS Sustainable Chemistry and Engineering	9	Yes	Green	10.1021/acssuschemeng.1c02713	https://repository.uantwerpen.be/docstore/d:irua:9240
32	Article in Journal	Al2O3-supported transition metals for plasma-catalytic NH3 synthesis in a DBD plasma: Metal activity and insights into mechanisms.	Yury Gorbanev, Yannick Engelmann, Kevin van't Veer, Evgenii Vlasov, Callie Ndayirinde, Yanhui Yi, Sara Bals, Annemie Bogaerts	Catalysts	11	Yes	Gold	10.3390/catal11101230	https://repository.uantwerpen.be/docstore/d:irua:9231
33	Article in Journal	Transforming catalysis to produce e-fuels: Prospects and gaps	Georgia Papanikolaou, Gabriele Centi, Siglinda Perathoner, Paola Lanzafame	Chinese Journal of Catalysis	43 (5)	Yes	Green	10.1016/s1872-2067(21)64016-0	https://iris.unime.it/retrieve/b95ba908-399d-4d61-aa99-216539f56ce4/1%20CJC.pdf/
34	Article in Journal	Catalysis for e-Chemistry: Need and Gaps for a Future De-Fossilized Chemical Production, with Focus on the Role of Complex (Direct) Syntheses by Electrocatalysis	Georgia Papanikolaou, Gabriele Centi, Siglinda Perathoner, Paola Lanzafame	ACS Catalysis	12 (5)	Yes	Green	10.1021/acscatal.2c00099	https://arxiv.org/abs/2205.01077
35	Article in Journal	Decoupling Electrocatalytic Reactions to Electrify Chemical Production	Gabriele Centi	ChemSusChem	15 (4)	Yes	Gold	10.1002/cssc.202200007	https://chemistry-europe.onlinelibrary.wiley.com/doi/epdf/10.1002/cssc.202200007
36	Article in Journal	Plasma assisted CO2 splitting to carbon and oxygen: A concept review analysis	Gabriele Centi, Siglinda Perathoner, Georgia Papanikolaou	Journal of CO2 Utilization	54	Yes	Gold	10.1016/j.jcou.2021.101775	https://reader.elsevier.com/reader/sd/pii/S2212982021003425?token=9133696ED27088CD18AB357114D9DDBA1855B281E9897F4FB1F6088FD7DD3D0A0CDD16E33BEFF07B7698D45D2ED52872&originRegion=eu-west-1&originCreation=20220509154553
37	Article in Journal	Nanocarbon for Energy Material Applications: N2 Reduction Reaction	Gabriele Centi, Siglinda Perathoner	Small	17 (48)	Yes	Green	10.1002/smll.202007055	hhttps://arxiv.org/abs/2205.05539

38	Article in Journal	Supported metallic nanoparticles prepared by an organometallic route to boost the electrocatalytic conversion of CO2	B.C. Marepally, C. Ampelli, C. Genovese, R. Sayah, L. Veyre, C. Dalverny, C.Thieuleux, E.A. Quadrelli, S. Perathoner, G. Centi	Journal of CO2 Utilization	50	Yes	Gold	10.1016/j.jcou.2021.101613	https://reader.elsevier.com/reader/sd/pii/S2212982021001803?token=19A0A3562FD15D46460E85878E828F353D585B8CEE742AE6DB20EDE0F079051F5C8F76FD90F6A8D18ED39623AF6CE3F8&originRegion=eu-west-1&originCreation=20220509154846
39	Article in Journal	Reuse of CO2 in energy intensive process industries	Siglinda Perathoner, Kevin M. Van Geem,Guy B. Marin, Gabriele Centi	Chem. Commun	57	Yes	Green	10.1039/d1cc03154f	https://iris.unime.it/retrieve/6ba30d6e-9ed4-4820-9b2f-fc8124531c17/5%20ChemComm.pdf/
40	Article in Journal	Current density in solar fuel technologies	Valentino Romano, Giovanna D'Angelo, Siglinda Perathoner, Gabriele Centi	Energy Environ. Sci.,	14	Yes	Green	10.1039/d1ee02512k	https://arxiv.org/abs/2205.05102
41	Article in Journal	Effect of N2 on CO2-CH4 conversion in a gliding arc plasmatron: Can this major component in industrial emissions improve the energy efficiency?	Senne Van Alphen, Joachim Slaets, Sara Ceulemans, Maryam Aghaei, Rony Snyders, Annemie Bogaerts	Journal of CO2 Utilization	54	Yes	Green	10.1016/j.jcou.2021.101767	https://repository.uantwerpen.be/docstore/d:irua:9768
42	Article in Journal	Microfluidic encapsulation for controlled release and its potential for nanofertilisers	Tu Nguyen Quang Le, Nam Nghiep Tran, Marc Escribà-Gelonch, Christophe A. Serra, Ian Fisk, David Julian McClements, Volker Hessel	Chemical Society Reviews	50	Yes	No	10.1039/d1cs00465d	https://universityofadelaide.box.com/s/7mn44tbvgnl9usafnirp6zlveszf8han
43	Article in Journal	Continuous microflow synthesis of fluorescent phosphorus and nitrogen co-doped carbon quantum dots	Liang liang Lin, Yijian Yin, Ziyang Li, Hujun Xu, Volker Hessel, Kostya Ken Ostrikov	Chemical Engineering Research and Design	178	Yes	No	10.1016/j.cherd.2021.12.037	https://universityofadelaide.box.com/s/za0nmjq4bzsycnfo66rrf6msxc0nppgc
44	Article in Journal	Thermal-plasma-assisted renewable hydrogen and solid carbon production from ionic liquid-based biogas upgrading: A process intensification study	Zhen Songa, Nguyen Van Duc Long, Hao Qin, Nam Nghiep Tran, Laurent Fulcheri, Volker Hessel, Kai Sundmacher	Chemical Engineering and Processing - Process Intensification		Yes	No	10.1016/j.cep.2021.108777	https://universityofadelaide.box.com/s/uc3tw3oql1kz8ocyl4m7uc69mi0fjiye
45	Article in Journal	Thermal plasma-aided chemical looping carbon dioxide dissociation for fuel production from aluminium particles	M. M. Sarafraz, F. C. Christo, N. N. Tran, L. Fulcheri, V. Hessel	Energy Conversion and Management	257	Yes	No	10.1016/j.enconman.2022.115413	https://universityofadelaide.box.com/s/s7noz3v3x1xbrcnt8o9bvl8t8dr72aj4
46	Article in Journal	Photocatalytic activity of CuO nanoparticles for organic and inorganic pollutants removal in wastewater remediation	Assefu Kassegn Sibhatu, Getu Kassegn Weldegebrieal, Suresh Sagadevan, Nam Nghiep Tran, Volker Hessel	Chemosphere	300	Yes	No	10.1016/j.chemosphere.2022.134623	https://universityofadelaide.box.com/s/tnv49nisqzt8g66uktpmwzns7pqqvi4e
47	Article in Journal	Techno-environmental assessment of small-scale Haber-Bosch and plasma-assisted ammonia supply chains	Jose Osorio-Tejada, Nam N. Tran, Volker Hessel	Science of The Total Environment	826	Yes	No	10.1016/j.scitotenv.2022.154162	https://universityofadelaide.box.com/s/tbbh7rdh3c27x81pqb7nscy4lmhix374
48	Article in Journal	The Effects of Pulse Shape on the Selectivity and Production Rate in Non-oxidative Coupling of Methane by a Micro-DBD Reactor	N. Pourali, V. Hessel, E.V. Rebrov	Plasma Chemistry and Plasma Processing volume	42	Yes	Gold	10.1007/s11090-022-10242-6	http://wrap.warwick.ac.uk/163605
49	Article in Journal	Synthesis of Thin Titania Coatings onto the Inner Surface of Quartz Tubes and Their Photoactivity in Decomposition of Methylene Blue and Rhodamine B	S.D. Svetlov, D.A. Sladkovskiy, K.V. Semikin, A.V.Utemov, R.S. Abiev, E.V. Rebrov	Catalysts	11	Yes	Gold	10.3390/catal11121538	http://wrap.warwick.ac.uk/161390
50	Article in Journal	Process Intensification in Photocatalytic Decomposition of Formic Acid over a TiO2 Catalyst by Forced Periodic Modulation of Concentration, Temperature, Flowrate and Light Intensity	Thomas Ellwood, Luka A Živković, Petr Denissenko, Rufat Sh Abiev, Evgeny V Rebrov, Menka Petkovska	Processes	9	Yes	Gold	10.3390/pr9112046	http://wrap.warwick.ac.uk/160156/
51	Article in Journal	Non-thermal plasma for process and energy intensification in dry reforming of methane	R.Sh. Abiev, D.A. Sladkovskiy, K.V. Semikin, D.Yu.Murzin, E.V. Rebrov	Catalysts	10	Yes	Gold	10.3390/catal10111358	http://wrap.warwick.ac.uk/144853/
52	Article in Journal	Tunable enhanced Faraday rotation in a defected plasma photonic crystal under external magnetic field with different declinations	N. Pourali, K. Alexander, V. Hessel, E.V. Rebrov	Journal of Physics D: Applied Physics	50	Yes	Gold	10.1088/1361-6463/ac2691	http://wrap.warwick.ac.uk/158425/